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R. C. Barnhouse

Pedigreed Seeds

for Progressive Growers

1928

A farmer ..

is judged by the crops he grows

.. Read inside



Honeoye Falls, N. Y.

A Word or Two of Introduction

To old friends and customers, no introduction is necessary, but to those who receive the Quaker Hill Farm message of better seeds for the first time, it may be interesting to know who we are and what we are doing here.

Briefly, we were brought up in town but that wasn't our fault. We worked on farms for spending money; liked farming; worked our way thru Cornell studying agriculture; served on the staff of the State College of Agriculture till ready to carry out the original idea, to farm.

We started farming here in 1920 when times were still good for farmers. We equipped and stocked at high prices and when our first crops were ready for market, prices crashed. It meant sink or swim for us and in order to make money we had to use every means possible to increase the returns from our work. We cut costs and saved labor wherever and however it could be done to advantage.

The one thing that helped most was the use of improved seeds. We used certified seed potatoes and one of the new oats from the College of Agriculture the first year. The potatoes yielded 318 bushels and the oats 78 bushels per acre, almost 100% above the yields of common seed in this section that season. The increases cost us only the extra price of the seed and the extra labor of harvesting. This showed us the easiest way to increase efficiency of both land and labor.

From those crops we supplied some of the neighbors with seed. Then step by step we have progressed to the point where we now grow and have grown for us thousands of bushels of seed from improved and test proven strains to supply hundreds of progressive growers all over the North Eastern States.

Letters from our customers tell us that they, too, are finding these better seeds one of the best means of keeping income ahead of expenses.

Our job is to follow the work of the plant breeders and pathologists at the various experiment stations, watch their test plots and secure the strains that have been proved superior in disease resistance, quality, yield and adaptation. Then we produce these on a commercial scale striving to keep them pure, clean and disease free. Seed selection, testing and treating, field dusting and spraying, careful handling, proper storing, thoro cleaning and grading are all done systematically. Most of our crops are inspected by specialists from the college and certified under the standards and rules of the N. Y. Seed Improvement Coop. Association. Official certification tags, showing the inspection findings are attached to all bags of the certified seed.

With this brief introduction to new friends and a word of greeting to old friends, let's turn to the "Seed Offerings" for 1928.

Sincerely,

K. C. Livermore

Seed Offerings—1928

POTATOES

Irish Cobbler. Most profitable early variety. Canadian certified seed from Prince Edward Island. High yields last year. See pages 4 to 8.

Green Mountain. Medium to late high yielding variety, best adapted to cool moist climates. Canadian certified seed. See pages 4 to 8.

Russet Rural. Vigorous high yielding late variety. Resistant to scab and rot. N. Y. and Michigan certified. See pages 4 to 8.

Smooth Rural. Preferred on some markets for light color. Otherwise similar to Russets. N. Y. certified seed from excellent strains. Pages 4 to 8.

OATS

Cornellian. One of best from 4,000 selections tested. High yield, highest feeding value, good straw, ripens with Alpha Barley. See page 9.

Upright. Stiffest straw of all; will stand where others lodge. Also one of best yielders, especially on rich land. See page 11.

BARLEY

Alpha. Two rowed hybrid. Highest yielder in Cornell tests. Best for mixing with oats because of type of growth and ripening later than other barleys. Ripens with Cornellian Oats. See page 12.

FIELD PEAS

Quaker Hill Selected. Small seeded, high yielding varieties, mature with Cornellian Oats and Alpha Barley. Seed has been tested and found free from disease infection (This is very important). See page 13.

MIXTURES

Oats and Barley. Cornellian Oats and Alpha Barley yield more together. Ready mixed, right proportions, bag to acre. See page 14.

Peas, Oats and Barley. Quaker Hill Selected Peas added to the above in recommended proportions. Ready mixed, bag to acre. See page 14.

Peas and Oats for green feed or hay. Upright Oats with Quaker Hill Selected Peas, stand up and yield biggest tonnage. See page 14.

CORN

Cornell No. 11. Best for silage when high feed value and labor economy are wanted. Early maturing high yielding yellow dent. Germination 90% to 98%. See pages 16 and 17.

West Branch Sweepstakes. A later and larger corn. More grain per acre than other large varieties. Best silage corn where large tonnage per acre is necessary. Germination 90% to 98%. See pages 16 and 17.

CABBAGE

Quaker Hill Danish. Is in the front rank for yield, for storage, shipping and eating qualities, and for uniformity. Seed is hot water treated to kill all possible seed borne disease. See page 18.

BEANS

Perry Marrow. Hybrid developed for disease resistance and yield at Perry Bean Laboratory. Spots less than other white varieties because of type of growth. Best marrow available. See page 20.

Robust Pea. Disease resistant, high yielding, developed by Michigan plant breeders. See page 20.

Wells Red Kidney. Discovered by New York farmer. See page 20.

SWEET CLOVER

White Blossom Biennial. Hardy New York grown. Scarified. Recommended for temporary pastures and green manure. See page 22.

WINTER GRAINS (Available in September)

Forward Wheat. Highest yielder in Cornell test. See page 23.

Honor Wheat. Considered best white wheat. See 23.

Cornell No. 76 Rye. A new high yielder. See page 23.

Potatoes

The Outlook for 1928

Making plans for the potato crop would be easy if we knew what the prices were to be. Of course nobody can predict that with certainty, but the report of the U. S. Dept. of Agriculture on proposed plantings is worth consideration. Reports from farmers in January indicated that in the North Atlantic and North Central states, an increase of about 14% in the potato acreage was planned. This is dangerous. We had plenty of acres of potatoes in these sections last year, some 10% more than in 1926. If blight in Maine and the Canadian provinces, and frost and drouth in Michigan, and blight and drouth in New York and Ohio and Pennsylvania had not done their work last season, potato prices in the East would have been a much sadder matter than they have been up to the last of February. We cannot rely upon the elements to protect us from over production every year. If this acreage should be planted, just a normal season would produce a profitless crop.

More and more publicity should be directed against this proposed increase of acreage. We should recognize by now that the only sound solution of the price problem in Agriculture is decreased acreage.

What to Do ?



Cutting Seed At Quaker Hill Farm

With this outlook, it would seem that the individual's program should be first, to reduce cost per bushel. Potatoes require so much labor irrespective of yield, that the best way to decrease cost is to increase yield up to reasonable limits. Then, to offset the effect of this on price, the acreage should be reduced. In other words, plan for a real good yield on a reduced acreage.

Reducing Potato Costs

One of the most effective means of reducing cost per bushel is the use of certified seed. Hundreds of tests all over the Country have shown that a bushel of certified seed will produce from three to eight bushels more potatoes than a bushel of common seed. Under average conditions and at a dollar a bushel premium for the certified seed, the cost of the crops from certified seed would be around six cents less per bushel. Business-like farmers have recognized this point, and while less than ten years ago the man who paid good money for certified seed was considered a fool by his neighbors—now the man who does not use it, at least for a seed plot, is considered unbusiness-like.

What Ails Common Seed ?

Walk thru a potato field planted with common seed and look at each plant. Here and there will be noticed stunted plants,—some with leaves appearing mottled light and dark, and perhaps slightly wrinkled (mosaic disease), some with lower leaves rolled lengthwise, later all leaves rolling and a general pinched up bushy appearance of the plant (leaf roll disease), some with a yellowing and wilting of the plants beginning at the bottom and working upward (wilt disease), and some with stiff upright growth, pinched up

leaves at the top, yellowing color gradually extending from top to base and a blackened stem below ground (black leg). These are diseased plants. There may be others with yellow dwarf or spindle tuber disease. The more there are the lower the yield of the field.

These diseases and several others usually are brought to a field in or on the seed. Some of them can live over in the soil and can spread from diseased to healthy plants thru the soil. Several of them are carried from diseased plants to healthy plants by insects—especially lice. In general the percentage of diseased plants doubles each year and yields decrease rapidly. Most of these diseases cannot be detected in the seed potato and there is no treatment of seed or plant to control them.

Walk thru a field planted with certified seed and with but few exceptions the plants are uniformly vigorous, with broad smooth dark green leaves and strong growing vines. From such fields one can take profit and pride.

The reason is simply that the certified seed was produced by healthy plants of a well bred strain.

Our Seed Potato Policy

It is our policy to supply the varieties which are best adapted to the territory we reach; and as soon as possible to have the best strains available in those varieties. If we can buy better stock than we can produce here we shall do it.

It is our intention to so regulate temperatures and ventilation in our storage and so grade and handle our seed potatoes, that they will reach our customers in the best of condition for planting and give complete satisfaction.



Our Canadian Cobblers Making 500 Bushels Per Acre On Muck

Cobbler the Best Early

Irish Cobbler, because of better market quality and general vigor is the most popular and profitable early variety.

The crop is made quickly and ripened quickly—ready to dig in 90 days or less. A bushel or two planted early will supply the table from the end of old potatoes till fall; and an acre or two for local sale will pay the summer help. For muck soils Irish Cobbler is without question the ideal potato. Yields of 400 to 500 bushels per acre are not uncommon on muck. On upland soils 200 to 350 bushel yields are frequent.

The Cobbler seed we offer was grown on Prince Edward Island in the St. Lawrence Gulf. Because of the northern location and isolation, seed from there is especially vigorous and disease-free. Inspection reports on the different lots we have received so far show black leg as the only disease; and more than half of our shipments came from fields reported entirely disease free. They were inspected by specialists from the Canadian Dept. of Agriculture and are certified under their rules and standards. Official certification tags are attached to the bags.

Green Mountain

This variety is grown extensively in Jersey and on Long Island as a mid season crop to follow Cobblers and as a late crop. It is grown as a late crop in New England, and Northern and Central New York, mostly where temperatures are not high and where rainfall is plentiful. In the drier and warmer climate of Western New York, Pennsylvania and Ohio, it does not do well. It is not liked on muck soil.

We have Canadian certified Green Mountain seed mostly from Prince Edward Island, but also from Nova Scotia and New Brunswick. These are lots chosen for their good inspection records and special breeding. They were inspected by Dept. of Agriculture agents and the bags are marked with the official certification tags.

Russet Rural

The Russet, also called Late Petoskey and Dibble's Russet, is our favorite; we like to grow it and we like to eat it.

It will do well under a great range of soil and climatic conditions. It is the predominant potato in Michigan and Pennsylvania. It will usually out-yield other varieties under either favorable or unfavorable conditions. We believe that more yield records have been made with Russets than any other variety. It seems to be freer from all the virus diseases, except leaf roll, than other varieties. In New Jersey tests it was found very resistant to scab. It does not suffer as much from insects as Cobblers, Green Mountains and some others. While it is not blight proof, it seldom is attacked so soon or so severely by blight as are other varieties. And when attacked, it develops less rot. This is important for those who do not spray or dust for blight.

The plants are slow growing, deep rooted, strong vined. Tubers round to oblong with very shallow eyes. Skin russet color and netted. Grown on light soils the color is light and stock is bright. On heavy or dark soils, the color is quite dark and objected to on some markets. Flesh is snow white regardless of soil.



Each
Week
the
Weeder
Works
Five
Rows
at
Once

This potato is a long keeper and a good shipper due to the russet skin which seems to retard evaporation and withstand rough handling. It does well as a mid-season crop but yields best when grown for later harvest.

Cooking and eating qualities are the best. Russets boil mealy in five to ten minutes less time than several other varieties. Their peeling waste, especially in machine peelers, averages noticeably lower than most other varieties due to better shape, less injury and shallower eyes. Large users of potatoes such as restaurants, hotels, etc., favor the Russet after a few trials.

The Russet is a money maker. We bank on it for the main crop and recommend it to you. It won't fail you if you do your part.

We offer again our own well bred certified Russets and also several lots of Michigan grown certified Russets, from recommended strains, bought to supplement our supply.

Reports by the College inspectors show no disease except 5/10% mosaic and 1 6/10% leaf roll, in our own Russets. The Michigan Russets showed in one case 1% wilt and trace of giant hill; in another, trace of giant hill and trace of black leg; the other lots already sold will not be reported here. Official certification tags will be attached to these bags.

Because the supply of Russet seed is so short, we offer also a few "near-certified" Russets of our own growing. These were grown from our own certified seed and intended for market. The field was not inspected and not rogued. Very little disease was noticed and the yield was good. It will produce nearly as well as the certified seed this year.

Smooth Rurals

This name is now used to include all the smooth skinned blue sprout potatoes of the Rural type. It includes Rural New Yorker No. 2, Heavyweight, Sir Walter Raleigh, Carmen No. 3, Number Nine and a dozen or more other differently named potatoes. These varieties are so similar in type that no one can distinguish between them with certainty. There are greater differences in yielding ability and quality between different strains of any one of these varieties than between different varieties.

We have been seeking the best strain of Smooth Rurals, regardless of its original name. We are not thru testing yet but so far, the best seem to be a strain of Rural New Yorker No. 2 and one of Heavyweight. Both have years of careful breeding back of them, which shows in yielding ability and type. So far there seems to be no choice between them.

The College inspection reports on fields of these Smooth Rurals were as follows:—

- Field 2. Rural New Yorker, 5/10% leaf roll, 5/10% mosaic.
- Field 3. Rural New Yorker, 1 2/10% leaf roll, 2/10% mosaic.
- Field 4. Heavyweight 2/10% leaf roll, 1% mosaic.

Official certification tags go with this seed.

The Smooth Rurals have the same soil and climatic adaptations as the Russets, but are grown extensively only in Western New York and Northern Ohio, where certain markets prefer the light color and smooth skin.



Dusting Controls Insects and Blight Just As Well As Spraying At Quaker Hill Farm

Grades

Unless otherwise specified, all our seed is graded U. S. No. 1 standard size and U. S. No. 1 small size. By the requirements for certification it must be submitted for grade inspection by the State Dept. of Agriculture and Markets before shipping.

Standard size is over 1 7/8" diameter and small size is 1 1/2" to 1 7/8" diameter, both with 5% tolerance for undersize.

The U. S. No. 1 grades tolerate 5% hollow heart and 6% all other defects of which not more than 1% shall be soft rot.

We aim to have our potatoes much nearer perfect than that, usually coming within 3% defects and no hollow heart. Moreover we throw out large potatoes of over 12 ounces weight.

The small size seed sells at the same price as the standard size. Experiments at the N. Y. State Agricultural Experiment Station have shown that small seed out of certified crops averages as good yields as the No. 1 size. It should not be used to grow seed from, because it is likely to show a little higher percentage of diseased plants than standard size seed. But for market stock it is more economical, easier and safer to use. We never have enough to supply the demand for it.

Use Certified Seed Potatoes for Profit and Pleasure

When making up your mind about seed potatoes don't forget that you and your help will spend many hours in that potato field this summer and whether they will be hours of drudgery or hours of pleasure and interest and pride, will depend largely on the kind of seed you plant. You know the kind of field you would like to see there and the kind you want your neighbor to see on your farm. That is the kind that will bring both pleasure and profit. Make the field smaller than you planned perhaps—but make it a good one.

See price list and order sheet enclosed.

Our Russets we are grading and delivering now. We measured and weighed one acre and the result was 368.4 bushels with only 1% of seconds. So far as I can find out, this is the top yield for Western Massachusetts this year.

G. Fred Pelissier, Hampshire Co., Mass.

Please give me your quotation on..... The Smooth Rural potatoes yielded a fine crop this past year. I trust the seeds will be as nice as those received in past years.

J. R. Cline, Essex Co., N. Y.

Enclosed please find our order for Barley, Oats and Corn. The seeds we have obtained from you in the past have given complete satisfaction, the Cornell 11 seed corn maturing as early as any dent corn we have been able to obtain and producing a larger tonnage of ensilage than any dent or flint variety that we have found can be relied upon to reach the dent stage in this climate.....

K. J. Seulke, Pres. Jefferson Farm Inc., Lincoln Co., Maine.

.... If it yields as good as it looks I shall feel that the boys and myself have made a good investment.

Russell I. Young, Cattaraugus Co., N. Y.

.....I can truly recommend the Canadian Cobbler seed. It was the nicest seed I have ever looked at and has yielded a big crop of choice clean potatoes. My potato field was the talk of the community.

Howard Kern, Lancaster Co., N. Y.

.....I bought 50 bu. of your usset seed potatoes from Miles Fry last spring and was pleased with them they took the eye of everybody that saw them am getting some of Mr. Fry again.

Martin Sensenig, Lancaster Co., N. Y.

.....The potatoes purchased of you last year did the best of several varieties used.

W. G. Pope, Allegany Co., N. Y.

.....I sorted and crated the potatoes a few days ago and the stock looks good to me. We found only 12 lb. in the 100 bushels that showed rot.

Henry Greffath, Livingston Co., N. Y.

.....the finest Cobblers I ever planted and the yield was more than double some uncertified Maine seed planted at the same time and costing more.....

J. O. Spangler, Somerset Co., Pa.



Cornellian Oats

More than 4,000 individually selected oat plants, hundreds of artificially produced hybrids and practically all commercial varieties offered by seedsmen, have been thoroly tested by the plant breeders at Cornell. Out of this great number, eight strains of oats have been found that are much superior. They are Cornellian, Ithacan, Upright, Victory, Standwell, Empire, Comewell and Wolverine.

Highest Yielder

Cornellian and Ithacan have averaged three to four bushels more per acre than the others in the college tests. In the last seven years Cornellian outyielded Ithacan four times and Ithacan outyielded Cornellian three times. Their average yields for the last seven years in tests in different parts of this State are Cornellian 56.3 bushels, Ithacan 56.6 bushels. This slight difference is more than offset by a higher feed value for Cornellian.

Cornell Bulletin 436 reports yields of 143 varieties and strains tested between 1914 and 1922. These published figures show that:

Cornellian Outyielded

American Banner by	11%	Lincoln by	20%
Twentieth Century by	16%	Big Four by	25%
Swedish Victory by	16%	Shadeland Climax by	31%
Silvermine by	17%	Swedish Select by	34%
Victory by	20%	Mammoth Cluster by	52%
Heavyweight by	20%		



Cornellians Make Most Feed Per Acre

..... I was well pleased with your seeds last year and so were three other men, who ordered with us. We are all ordering again this year with six or seven others. The corn nearly matured was the best silage we ever had. The Alpha Barley was a fine crop and the oats did well the small oat does not look as good but in the farm bureau test they out yielded all others.

J. C. F. Burlington Flats, N. Y.

..... The Cornellian Oat continues to do fine. On an average of 25 acres per year for the past three years they have yielded 70 bu. per acre. I am planting 37 acres this year.

Hugh Fergus, Butler Co., Pa.

..... I shall be very glad to receive a copy of your catalog. The seed purchased last spring was so satisfactory and your way of doing business so pleasing that I wish the following persons to get acquainted with you.

R. L. Fortune Portage Co., Ohio

Highest Feeding Value

Cornellian tested 75% clear meats. The next highest was 72.5% while most oats test only 60% to 70%. Considering yield in connection with this, it is safe to say that Cornellian produces 50% more weight of oat meats than most of the oats now grown on New York farms.

In actual feed Cornellian outyields Ithacan.

Strength of Straw

Of these better oats only one is considered to have a stronger straw than Cornellian, that one being Upright. Except on very rich land, however, Cornellian usually stands as well as Upright and better than most oats.

Ripens With Alpha Barley

The Cornellian Oat is enough earlier than Ithacan and the other good oats to ripen with Alpha Barley. This is an important advantage for Cornellian because the combination of these two in mixture is very desirable, as described on page 14.

Origin and Description

The original selection of Cornellian came out of a field of Canada Cluster, but it must have been a mixture or a sport, for it does not resemble that variety. It is tree type with stiff wiry stem and rather narrow leaves. The grain is grayish to black, very thin hulled and noticeably slim and small. The meat is large in proportion. The grain usually weighs 38 to 40 lbs. per struck bushel. It matures a little earlier than mid season varieties.

Our Cornellian Seed

Six fields of Cornellian Oats were inspected by the College of Agriculture. Five of these met the highest standards and can be sold as Registered Certified. The other field met standard for Certified. Lack of space prevents printing inspection reports in detail. All lots were free from noxious weeds, showed purity over 99.50%, and germination tests ranged from 96% up to 99%.

Three other fields were planted with the same seed and were equally good, but were not entered for inspection because the grain from them is for use in mixtures. These are free from noxious weeds, test 99.50% or better, purity and germination 98% to 100%.

Cornellian may be sown a little lighter than other oats because of small kernels. From 2 to 3 bushels by weight is the recommended sowing, the amount varying with soil. Three bushels by weight usually is only 2½ by measure. See price list and order sheet enclosed.



High Yielders That Ripen Together—Cornellian Oats—Alpha Barley

Upright Oats

Many farms have certain fields on which oats usually lodge. In these cases stiffness of straw is the all important consideration in choosing a variety. A large yield is of no advantage unless it can be harvested.

Stiffest Straw of All

Upright Oats have demonstrated their ability to stand when all others have gone down on scores of New York farms. The strength of the straw is remarkable. Even on the richest land they will stand thru severe storms. Under such conditions they will readily outyield Cornelian or Ithacan, altho on upland they average about four bushels less per acre. For grain this unquestionably is the oat to use on bottom lands and on many dairy farms where the cropped land is rich.

Best for Green Feed or Hay

Upright is a tall leafy type of oat and, in our judgment, yields a heavier tonnage of green feed or hay than any other variety. Its standing ability will enable it to carry a heavy load of peas, when peas are sown with it.

Origin and Description

Upright is a pure line derived from a single plant selected in Jefferson County in 1913. It is a tall variety, with stout leafy straw. It is a little later in maturity than Cornelian but not too late to use with Alpha Barley and our Selected Peas, as determined last season in our tests. The kernels are large, long and bearded; test 71.4% meats. The grain usually weighs 36 to 38 lbs. per struck bushel.

Our Upright Seed

Four fields were inspected by the College of Agriculture and all passed certification requirements with no noxious weeds, purity above 99.75%, and germination 91% to 98%. One field grown for mixing purposes was not inspected. It was from the same seed and is equally good in every way. Germination 99%.

The usual rate of sowing oats for your condition should be followed with Upright, usually from 2½ to 3 bushels by weight.



Upright Oats Yield Well And Seldom Lodge

Alpha Barley

Breeding work with barleys similar to that with oats described before, is being carried on at Cornell. So far Alpha, Wisconsin Pedigree No. 5 and Featherstone No. 7 (from Minnesota) stand highest in the tests. They have averaged two to ten bushels per acre better yield than the better commercial varieties on the seed market.

Alpha's average yield in tests about this State for the last six years is 44.9 bushels, for Featherstone 41.5 bushels. Wisconsin Pedigree was included in these tests during the last three years and averaged 41.8 bushel as against 42.3 for Alpha in the same year. Michigan Black Barbless was included four years but averaged 6.2 bushels less than Alpha in those years.

Description

Alpha Barley, recently developed at Cornell, is a cross between Manchuria, a six-rowed barley, and Champion of Vermont, a two-rowed barley. This hybrid is two-rowed. Compared with other barleys, it has a taller straw, the heads do not crinkle down so much, it will stand longer without shelling, and it matures later. The kernel is very large and plump. The plant stools freely. Sixty bushels per acre and even better yields frequently are secured.

Alpha Barley has one weakness. In some seasons it shows considerable smut. This particular smut is carried inside the seed rather than outside as with oats and certain six-rowed barleys, and can be controlled only by hot water treatment of the seed. In most seasons this smut does not appear at all or may affect less than 1% of heads, and be of no consequence. Cold wet conditions following planting seem to favor the development of the smut and 5 to 10 % may appear. In spite of this, Alpha Barley has ranked high in yield.

Ripens With Cornellian Oats

The later maturing of Alpha Barley as compared with other varieties is almost as important as its yielding ability. It ripens almost exactly with Cornellian oats. This makes possible the use of these two wonderful yielding grains in mixed sowings. See page 14.

Our Alpha Seed

Four fields were inspected by the College of Agriculture. Three have met the high standards for Registered Certified and one for Certified. Our stock seed field was grown from hot water treated seed and showed no smut as well as no oats and only a trace of mixture. The other three fields showed only 5 or 6 smutted heads in ten thousand, germination tests were 90% to 96%, purity 99.5% or better, no noxious weeds, only trace of mixture and no oats, except one field certified which showed only 16 oats in 10,000.

Several fields from certified seed were grown for mixing purposes and were not inspected. The purity, germination and freedom from weeds is as good as in the certified seed.

Because of larger sized berry, a little heavier sowing of Alpha Barley than for common barleys is recommended, about $2\frac{1}{4}$ bushels.

We Advise Alpha

Alpha is unquestionably the best barley. We offer high quality seed of this wonderful hybrid at reasonable prices. See price list and order sheet enclosed.



College Inspector in Our Oats

Field Peas

Quaker Hill Selected

Previous to last year we could list only "Canada Field Peas" like all other seedsmen here and could tell nothing about them except their appearance and germination. Now we know what we offer and know it is good.

Variety Test

In cooperation with the College we have conducted variety tests of field peas, using as many kinds as we could secure. There were great differences in their yields and adaptation for sowing with our oats and barley. Four stood out as noticeably better than the others and we now confine our purchases to these.

Serious Pea Diseases

In recent years many who have tried field peas have not harvested enough to justify the expense for seed. Some have failed even to get their seed back. A few have done very well. The weather, the soil and everything else has been blamed, but now we know that much of the trouble has been caused by two or more fungus diseases carried on pea seed. These diseases are often serious, causing rot of the lower stems and spotting of the pods and foliage. When conditions favor, they may completely destroy a crop.

Disease-Free Seed Necessary

No treatment of the seed has proved satisfactory. The only way to avoid these diseases seems to be to use tested disease-free seed. We have had about sixty samples tested at the Geneva Experiment station. Approximately three out of four show sufficient infection to make them undesirable and in most cases unfit for seed planting.

This frequency of bad infection proves it unwise to spend money for field pea seed unless it has been tested and found disease-free.

We have tested, disease-free lots of the best yielding varieties that ripen with Cornelian Oats and Alpha Barley.

Inoculation May Be Necessary

On soils which have not produced peas before, they usually will do much better if the soil or the seed is inoculated with the particular strain of nitrogen fixing bacteria which works on pea roots. The Laboratory of Plant Physiology, College of Agriculture, Ithaca, N. Y., on request will send free Extension Bulletin 2, Legume Inoculation, and prices on the cultures which they furnish at lowest cost.

Hints

Plant peas early. Plant deeper than for grains. Some farmers report good results from dragging peas in before drilling grain. Pheasants are very destructive in peas. Watch out for them.

Our Pea Seed

These selected lots differ in color and shape, but all are small seeded. They are disease-free and weed free and test over 90% germination, mostly 95% to 98%. We offer these as Quaker Hill Selected Field Peas, confident that our painstaking precaution will benefit you.

These peas have cost us at carload rates more than unknown and untested seed is retailing for. You can buy cheaper pea seed, but the chances are 3 to 1 that you will be wasting your money. Better use tested disease-free seed or not any. Our supply is limited. See price list and order sheet enclosed.



Mixtures

For Grain

It is a proven fact that oats and barley mixed will yield more than either alone, provided they ripen about the same time. Most oats are too late and most barleys too early for satisfactory results when mixed. Fortunately Cornelian Oats and Alpha Barley ripen together. We find that Upright Oats, tho a little later, ripen closely enough with Alpha Barley so that on rich land they may be used to avoid danger of lodging. The addition of field peas increases the feeding value and usually the yield too, if conditions are favorable for the peas. Some of our customers have reported yields of from 70 to 100 bushels per acre. There is no better way to reduce the feed bill.

For Green Feed or Hay

Mixtures for summer green feed to supplement dry pastures or for hay when there is a shortage, pay very well. We recommend our Upright Oats and our Selected Peas for this purpose. Barley may be added or substituted for peas.

Caution Regarding Peas

Before deciding to use field peas in a mixture consider the following points:

1. On rich soil where oats are likely to lodge, peas will grow too much to vine and too little to grain. Danger of lodging will be increased.
2. A fairly good supply of lime in the soil is essential for good results with peas, that is, enough lime for clover or alfalfa.
3. The variety should be one that ripens with the oats and barley.
4. Peas should not be used on land recently in any kind of peas which showed signs of disease. The pea diseases seem to carry over in the soil for several years and are likely to damage the new crop.
5. Be certain the seed is disease-free. Read previous discussion beginning page 18.
6. Early sowing is better for peas.

With conditions right, the addition of peas is worth while. Besides making a better feed, especially for cows because of the higher protein content, it usually increases yields and leaves considerable nitrogen in the soil. Those who have used this mixture of Cornelian Oats and Alpha Barley with good field peas under favorable conditions, are most enthusiastic about the results in the granary and in the milk pail.



Peas, Oats and Barley in Montgomery Co. N. Y., from Quaker Hill Farm Seeds. Upright Oats used. Mr. Fonda, Sr., on the binder, recalls the days of cradling grain on the same field. Picture by courtesy Montgomery Co. Farm Bureau

We Mix Them—You Plant Them

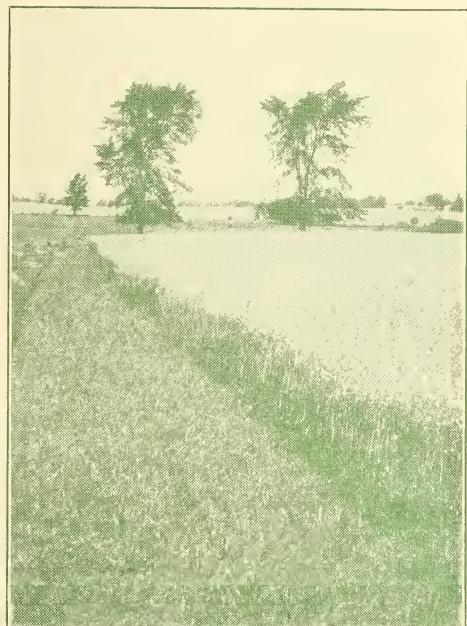
For your convenience we offer these grains ready mixed in the recommended proportions, each bag containing the usual amount sown per acre. Near-certified oats and barley and our Quaker Hill Selected peas described herein are used. They are thoroly cleaned separately and then mixed. The amounts used are:—

40 lbs. Cornelian or Upright Oats and 60 lbs. Alpha Barley making 100 lbs. per sack.

30 lbs. Selected Peas, 32 lbs. Cornelian or Upright Oats and 48 lbs. Alpha Barley making 110 lbs. per sack.

48 lbs. Upright Oats, 60 lbs. Selected Peas making 108 lbs. per sack

You can save yourself considerable trouble and delay in the busy planting time by ordering these all cleaned, mixed, bagged, ready to dump in the drill and sow. Order oats and barley mixture if your conditions are not right for the peas. If they are right then by all means use the peas too. See price list and order sheet enclosed.



Upright Oats Standing Right Up Where All Others Have Lodged

.....We prefer the stronger straw (Upright) on our soils. The crop which Mr. Fonda produced was outstandingly good. It stood up well, yielded well and it was a pleasing crop to inspect.

Charles M. Austin,
County Agricultural Agent,
Montgomery Co. N. Y.

.....The yield on one 8 acre piece of oats and barley mixed, with a small quantity of peas and buckwheat added, figured by weight of 32 lbs. to the bushel was well over 100 bus. to the acre. Thanks again. F. N. Decker, Onondaga Co., N. Y.

.....Mr. is in the market for good seed oats. I was so well pleased with those I had last year that I recommended them. Kindly send him your circular with price list. Jordan Philip, Columbia Co., N. Y.

.....My opinion is that the use of peas in mixtures of grain for hay and also for threshing is very much worth while in the northern counties of the State. Very often the practice is worth while also in Central and Southern New York depending on how favorable the season may be for peas. I feel, however, that in Southeastern New York on account of the early coming of warm weather the chances for success with the crop are rather limited. In all cases I am thoroly convinced that the use of disease-free seed is of fundamental importance. On our farms in Livingston County last year we had the best crop of barley, oats and peas we ever grew. We used seed which we obtained from you. I am of the opinion that the main reason for our unusual success was that the pea seed was disease free. I am intending to grow some more of the mixture this year using disease-free seed.

—John H. Barron, Extension Professor, Field Crops, N. Y. State College of Agriculture.

I bought 2 bu. Cornelian Oats from you in 1924 which we planted on almost exactly 1 acre by measure. Harvested 83 bus. by measure from this one acre. Oats weighed 38 lbs. to bushel which brings up yield to 98 1-2 bu. per acre by weight.

Julius E. Parsons, Schoharie Co., N. Y.

Corn

For Silage

Ideal silage corn for any section is that variety which produces a fairly large tonnage of good textured silage containing a large proportion of grain. It should be ready to cut before the usual date of killing frosts, and not so tall as to be difficult to handle.

The time has passed when silage was judged mostly by its height and tonnage, regardless of feed value. We know now that some of the biggest corns produce no more tons of feed, figured in dry weight and not within twenty or thirty dollars worth as much grain in that tonnage as some of the smaller earlier maturing varieties.

Unfortunately it has not been possible to combine largest tonnage and largest grain yield in the same variety. That, of course is what the plant breeders are working towards. At Cornell several excellent strains have been developed and others have been produced by individual growers. These and other new strains are tested each year in eight or ten different counties by the State College of Agriculture. The yield records of some of the best are as follows:

Averages from Corn Variety Tests in Various N. Y. Counties

1921 - 1922

Variety		Tons per acre	Dry shelled grain in silage	
		Green weight	Dry weight	Lbs. per acre
King Philip	11.4	2.8	1988	
Alvord's White Cap	11.4	3.0	2320	
Cornell No. 11	13.0	3.1	2075	
Cornell No. 12	14.2	3.1	1632	
Halls Gold Nugget	14.4	3.1	1850	
Luces Favorite	16.4	3.2	1367	
West Branch Sweepstakes	16.5	3.5	1756	

Good Yield With High Feed Value

Our choice of these better silage corns is Cornell No. 11 for the North Eastern States. It produces a good tonnage of high quality silage,—leafy enough to pack well and keep well and eat well, mature enough to have high digestibility, and grained enough to save many dollars on the feed bill. It usually is ready to cut before frost comes, which means better quality and less rush in filling silos. If part of crop is not needed in the silo or cannot be cut because of soft ground, it will not be wasted for there will be plenty of ears fit to husk. All these advantages make Cornell No. 11 a mighty satisfactory silage corn.

High Yield With Good Feed Value

For those farms on which crop land is limited in proportion to the stock kept and which must sacrifice quality of silage in order to get quantity, our choice is West Branch Sweepstakes. Of the heavy yielding corns this variety gives more dry weight and more grain in it than any other.

For Grain

Cornell No. 11 is also our choice for husking corn. In four years of husking tests, 1919-22, in different counties in New York, it led with an average of 65.7 bushels shelled corn per acre. There are several dent corns of earlier maturity and one or two flints which in short seasons may outyield Cornell No. 11, but in most parts of New York and nearby sections where it is practicable to grow corn for husking, Cornell No. 11 proves to be the most satisfactory over a period of years. And we like the yellow color for the vitamins that go with it.



Cornell No. 11

This variety is an early maturing high yielding strain developed out of Pride of the North by the plant breeders of Cornell. Years of careful selecting and testing were necessary. The ears are medium length, 14 to 22 rowed, and average 84% shelled corn. The grain is yellow, dented, and compact on the ear. Cobs are red. Matures in 120 days or less. Stalks are well leaved, not woody, medium length and handle well in harvest.

West Branch Sweepstakes

This variety is thought to be the product of natural crossing of several distinct types. While so variable in appearance as to often be mistaken for a mixture, it is exceptionally vigorous, probably as a result of recent crossing. The ears range from yellow and white cap to light red and even deep red, but most ears have amber sided, white capped kernels. The ears are 12 to 18 rowed; kernels broad and somewhat shallow; cobs white. It matures in 125 to 135 days. Stalks are strong and erect, usually 10 to 12 feet tall, with abundant foliage.

Our Corn Seed

The Cornell No. 11 grown here at home has passed inspection and is certified with a test of 94% germination. Two other fields grown for us matured in excellent condition and February tests gave 92%, and 98% germination. Our Sweepstakes was grown in Pennsylvania especially for us from ear tested disease free seed. Tests in February showed from 90% to 98% germination for different lots.

Good Seed Corn Scarce

The continuous rain of last November ruined for seed purposes thousands and thousands of bushels of corn intended for seed. It is rapidly becoming apparent that the seed situation will be practically as bad as a year ago. Again there will be thousands of bushels of unadapted seed shipped in and sold under false names and again there will be thousands of bushels of adapted varieties sold under much too optimistic germination statements. And worst of all, there will be thousands of acres of corn to drag out and replant, just as there were last year and thousands of acres of disappointing and unprofitable corn harvest.

We urge every farmer who reads this to be certain of the origin of the corn he buys and to take nobody's word for its germination but to test it himself. And, lastly, buy early. See our price list and order sheet enclosed.

I am enclosing an order herewith to be sent to my farm. We were very much pleased with the corn and the Cornelian Oats which we got last year. From two acres we had nearly 100 bushel which was excellent for our part of the country. We now want to add the Upright strain. Our corn also was excellent. Please ship as per directions, when convenient. Very truly yours, F. K. Hoffman, New York City

Kindly send your catalog. I am particulary interested in Cornell No. 11 seed corn. I have tried several different varieties but this seems to be the best for this locality.

H. C. Grinnell, Fulton Co., N. Y.



Cornell No. 11 Makes Quality Silage

Quaker Hill Danish Cabbage

Prospects for 1928 Late Cabbage

Cabbage is a subject which many farmers are still trying to forget. Yet, most likely, this is the very year to think cabbage and plan for it. The chances are two to one that too few acres of Danish Cabbage will be set out in 1928. With acreage reduced, even a very favorable season probably would not over supply the market, while a normal or poor season would spell good prices. We urge you who have good cabbage soil and markets and understand cabbage growing, to plan for your usual acreage, this year.

Strain Tests Tell Story

Each year several of the county farm bureaus have yield tests using only the better strains available. The following reports have come to us:—

ORLEANS COUNTY, N. Y.

	1926 Averages of three tests	1927 Averages of three tests
Quaker Hill Danish	17.41 T per A	Quaker Hill Danish 16.4 T per A
Next highest	17.15 T per A	Next highest 15.4 T per A
Next	16.87 T per A	Next 14.8 T per A
Lowest	11.80 T per A	Next 14.6 T per A
		Another strain used in only one of these tests, yielded 13.6 T per A

ERIE COUNTY, Pa.

(All yields low due to less favorable soil conditions)

1926 1927 *

Quaker Hill Danish	10.23 T per A	Quaker Hill Danish 9.2 T per A
Next highest	8.99 T per A	Next highest 8.8 T per A
Lowest	7.62 T per A	Next 8.4 T per A Next 7.0 T per A Lowest 6.0 T per A

*Omitting one lot apparently not a commercial strain.

These comparative yield tests between the leading strains under good and bad conditions, are the best possible indications of real merit. Yet it is interesting to know some of the best yields of a strain. In one of the three Orleans County tests of 1926 our strain yielded 20.56 tons per acre. No other strain reached the 20 ton mark in either year. In the 1926 test at Cornell, Quaker Hill Danish yielded 24 2-3 tons per acre. This last season, Mr. C. R. White, of Ionia, N. Y., Pres. N. Y. State Farm Bureau Federation, a farmer who knows his cabbage, grew 25 tons per acre on five acres, from our seed.

How Yield and Quality Are Secured

We started in 1921 with what was unquestionably the best strain of short stem Danish available. It originated from an artificial cross and was improved by long and rigorous selection. By the same methods we are striving to still further improve it. Only the finest of the matured heads are saved for raising the seed. Each one is scrutinized closely when saved and again when set out. Our seed plat is located miles from any other so that crossing with other strains is not to be feared. All this results in uniformity as well as yielding ability and quality.

Most of the cabbage seed on the market is from immature heads whose yielding ability, type, and quality cannot be told. At best the seed is two generations and often several generations from selected mature heads. Since cabbage is cross pollinated, this method allows double or treble the opportunity for reverting and inevitably results in greater variation and lower yields. Seed raised by this cheap method is wholesaled here at \$7.50 to \$1.50 per lb. and retailed at \$2.00 to \$5.00.

Compared with Quaker Hill Strain seed, all of which is first crop from selected mature heads, this cheap seed usually produces 2 to 8 tons less and is much poorer in quality. It doesn't take long to figure which pays best.



Description

Stem. Short, substantial, carries the head well.

Shape. Head deep, rounding top and sides, slightly tapering base, compactness permits close setting which is necessary for large yields of best market size heads, 4 to 6 lbs. Tapering base makes cutting easy and trimming unnecessary. Leaves cling better.

Solidity. Leaves have long lap over top. They bind under pressure of growth from center, and interior becomes very compact. Heads usually weigh about 30% more than heads of the same size in most other strains. Long overlap prevents cracking.

Storage and shipping qualities. Solidity makes it a wonderful keeper. Stands handling well, shrinks little, trims easily, holds color beautifully.

Color. Blush tint in green, typical of true Danish, and pink blush on cheek. A well faced ear is a beautiful sight. The buyer always wants another.

Texture and flavor. Leaves thin, tender, comparatively smooth. Ribs and vines not coarse or stringy. Flavor delicate, a little sweet yet spicy but without bitterness. Fit for an Epicure.

Yield. Fifteen to twenty tons under ordinary good treatment, and twenty to thirty under favorable conditions, with ample fertilizer.

Uniformity. Very good. Noticeably better than most imported stocks.

Our Seed

The seed offered is thoroly recleaned and is treated by the latest hot water method.

This method of treating is much more expensive than any other but it is the only method that can be relied upon for complete protection against diseases carried on and inside the seed. The losses from these diseases especially black leg and black rot, may be so serious that we will not sell seed unless it is hot water treated, even tho field inspection and laboratory tests show our plants and seed to be disease free. We want double assurance.

Our tests show purity by weight 99.8%, weed seeds none, germination 95% before treating. If the germination is lower after treating (it sometimes loses one or two points) we shall allow enough more seed for a pound to make it equivalent to 90% germination.

Allow one pound of seed for two to four acres of cabbage. It is better to have some plants to sell than to have to buy some.

This is fresh, vigorous and safe seed from a strain that has proved its yielding ability and quality. See price list and order sheet enclosed.



5 acres—Quaker Hill Danish—25 T. per acre. Grown on White Farms, Ionia, N. Y.

Beans

More Interest in Beans

At last beans have had a favorable season. Those who had the courage to plant again after the disheartening losses due to the weather of the preceding years, have harvested good crops and are receiving fair prices. There is some prospect of a shortage of beans and higher prices before the season is over. All this will stimulate renewed interest and bean growing probably will resume its normal place in Western New York farming. Let us hope that not all the discouraged cabbage growers will swing to beans and over supply the bean markets next fall. Less fluctuation of acreages is best for everybody.

What Seed to Use

Seed of proven worth is scarce and too many acres will be planted with imported seed of unknown adaptability and disease resistance. This is likely to prove costly to the grower. Mosaic, anthracnose, bacterial blight and other diseases of beans will continue with us. The only safe plan is to use those strains which have been definitely proven most resistant to these diseases and the highest yielders. They are Perry Marrow, Robust Pea and Wells Red Kidney for the North Eastern States.

Perry Marrow

The outstanding merits of this bean are its yielding ability; its great resistance to diseases; and its strong upright type of plant which carries the crop well off the ground and enables the growers to harvest the good yield with very little weather damage or spotting. Harvesting can be delayed until the crop is thoroly dried, when it can be pulled and drawn same day. There are good possibilities of combined harvesting and threshing this bean. Yields of 25 to 30 bushels are secured. It is quite readily salable, but might be over supplied. The eating quality is poor. In our opinion it is the safest bean to grow, considering disease and weather risks.

Credit is due Dr. N. H. Burkholder of the N. Y. State College of Agriculture and his co-workers for producing this wonderful bean at the Bean Laboratory, at Perry, N. Y., about eight years ago.

It is from a cross between a high yielding common white marrow and the anthracnose resistant Wells Red Kidney. It combines the good qualities of both as was proven before the seed was distributed. It is also resistant to mosaic but susceptible to blight.

The stock of Perry Marrow originally put out for increase included four strains which were apparently the same. It has been found since that one strain is more susceptible to blight than the others, and another strain is quite susceptible to one of the anthracnose diseases. The remaining two strains have been separated and propagated separately. One has proved to be a slightly better yielder.

It is from this strain of the Perry Marrow that we offer seed this year. No certified seed is available due to loss of the crop by hail but we offer beans from the same seed. This near certified seed germinated in our test 97%. Seed is cleaned, graded, hand picked and sacked. Plant five pecks per acre. See price list and order sheet enclosed.

I would like to have your new catalog as I was very much pleased with seed purchased from you last year. Vernon U. Morse, Sullivan County, N. H.

Robust Pea Bean

In 1908 at the Michigan Agricultural College one healthy bean plant was found in a plot infested with mosaic disease. Its progeny proved practically immune to mosaic, very resistant to anthracnose and somewhat resistant to bacterial blight. Different strains were developed and in 1915 the highest yielding one was distributed to growers. There is no other pea bean available, as disease free and as high yielding as this. Yields of 40 bushels per acre have been harvested.

Robust is a small white pea bean. It has a larger root system, withstands hot weather better, blossoms later and ripens 10 days later than common pea beans. The leaves hang late, drop all together and the crop ripens evenly. In this locality it should be planted June 1 if to be followed by wheat; otherwise a little later is better.

No Robust fields were inspected last season. Near-certified seed is offered. It is two years from Michigan registered seed and is one of their newer strains of Robust. It seems to have somewhat more uprightness in its growth and to hold its crop off the ground better than the original strains.

The seed germinated 100% according to our tests. It is cleaned, graded, hand picked and sacked. Three pecks is the rate of sowing. See price list and order sheet enclosed.

Wells Red Kidney Bean

About 26 years ago, Mr. Byron Luce, a farmer living near Marion, N.Y., had a piece of beans badly affected with anthracnose. He noticed a few apparently disease free pods and gathered a few pounds of them. These were increased in separate plots until there were enough to plant his field. The resulting crop was conspicuously fine and attracted the attention of Mr. John Q. Wells of Shortsville. He bought the crop and gave the seed his name. Since then he has further improved it by selection.

This bean is very resistant to anthracnose, not much affected by mosaic but susceptible to blight. At Geneva Experiment Station Dr. Gloyer has found that planting not earlier than June 15 to 20 enables it usually to escape most of the blight. In some seasons this is a little late to be sure of maturing the crop in the fall. It may be safer to plant a little earlier. Selecting a location with good soil drainage and good air drainage helps prevent blight, and so does generous fertilizing.

Near-certified seed is offered. The germination is 98% by our test. All seed is cleaned, graded, hand picked and sacked. Five to six pecks is the rate of sowing. See price list and order sheet enclosed.

New Geneva Strains

For some years Dr. W. O. Gloyer of the Geneva Experiment Station has been working on field beans. He has developed several new strains, three of which we are growing in increase plots, with the expectation of having seed to offer in about two years. One is a white kidney and the others red kidney. They promise to be superior in many respects to those now in use.

..... I desire to sow some of your treated certified wheat. Would like 25 bu. of Forward and am enclosing check. Potatoes look fine from seed purchased of you.
M. H. Blake, Portage Co., N. Y.

..... The wheat was unloaded Saturday. It looks good. Even better than the sample. A. Coan, Sussex Co., N. J.

.....of your Quaker Hill Danish Cabbage seed. This is for a couple of boys in my department who had this seed last year and were very much pleased with the cabbage produced.
E. G. Shadd, Lewis Co., N. Y.



Sweet Clover

This "weed" has proved valuable and is being used more and more for temporary pastures and as a soil improving crop. It is not recommended for hay. This year with sweet clover so low priced, it will pay to use more. Its soil requirements are not quite so exacting as for alfalfa.

For Pasture

Sowing alone in the spring will make considerable pasture the first season and an abundance the second season. The more common method is to sow on winter grain or with spring grains. This will give some pasture in the fall if grain is cut high, and a full crop the next season.

Its advantages lie in furnishing late summer and fall pasture and earlier spring pasture than other crops, in withstanding drouth better than other pasture plants and especially in its yield. The amount of stock it will carry is surprising. It cannot be used for permanent pasture unless pastured lightly enough to permit natural reseeding or unless seed is broadcast every spring. This seldom proves satisfactory.

As a Soil Improver

Sweet Clover makes bigger and quicker growth than alfalfa, below ground as well as above. It thus adds much humus to the soil and at the same time much nitrogen is accumulated in the root nodules.

There are several ways to use it as a soil builder. Cheap land or idle land may be sowed to sweet clover and left as long as desired. The sweet clover will reseed itself and the land will grow richer every year. When used in rotation for hay or temporary pasture, it will be found to have improved the soil noticeably in addition to making the crop. On land that is farmed intensively, sweet clover can be squeezed in between other crops without loss of time. At Quaker Hill Farm where seed potatoes and seed oats are grown alternately in a two year rotation, sweet clover is seeded in the oats and plowed under the next spring for potatoes. This adds humus and nitrogen equivalent to a liberal coating of manure with no cost except seed, and no back aches.

Precautions

In pasturing or feeding sweet clover use the same precautions you would use with alfalfa or other clovers to guard against bloating the stock.

And in cutting or pasturing do not go below the first branches. To do so stops further growth. Mower should be rigged with special high shoes on the cutter bar.

Unscarified seed should be fall sown or sown very early in the spring.

Scarified seed is better for sowing with spring grains. It germinates quickly and so should not be sown too early as there might be freezing injury.

Inoculation of Seed

Sweet Clover is one of the legumes which requires the presence of nitrogen fixing bacteria in the soil, for its best growth. Where seeding on land that has not been known to grow sweet clover or alfalfa well, it is important to inoculate the soil or the seed with the sweet clover bacteria. Write to State College of Agriculture, Ithaca, N. Y., for Cornell Extension Bulletin 2, Legume Inoculation and for prices on cultures.

Our Seed

The seed we offer is from a hardy strain grown here. It has been hulled, scarified and thoroly recleaned. Our tests give 99.8% purity, weed seeds 0.3%, noxious weeds 0%, germination 91%, tested February 1928.

We have tried sweet clover and like it. We think you will too. See price list and order sheet enclosed.



Grains For Fall Sowing

Forward Wheat

This strain, originated by the plant breeders at the N. Y. State College of Agriculture, was developed from a beardless head of Fulcaster wheat. It is like this variety except that the beardless character is retained and it out-yields the parent stock. The large heads have white chaff and are carried on good stout straw. The grain is large, red and somewhat hard. It has a high protein content, testing as high as 13% and making it valuable as poultry feed. Milling and baking qualities are the best. It is used for bread flour but is not liked for pastry flour or shredded wheat. This strain has proven very winter hardy, very resistant to Hessian fly and almost immune to loose smut. It is susceptible to stinking smut, as are most all varieties. Forward Wheat ripens a few days earlier than the white wheats of this section and should be cut before fully ripe because of a tendency to shell. In the College tests at Ithaca, Forward has out-yielded the other recommended wheats, Honor and Junior, No. 6 and all common varieties. In the last six years at Ithaca, N. Y., Forward yielded from 27.7 to 46.3 bushels per acre and averaged 34.2 bushels. It seems to be the best wheat yet introduced for eastern conditions.

Honor Wheat

This wheat originated from a single exceptionally fine head of Dawson's Golden Chaff and has been improved by constant selection by the College plant breeders. It ranks among the highest yielding white wheats and is preferred because of its winter hardiness and fly resistance. Like other wheats it is susceptible to stinking smut and also slightly susceptible to loose smut. The heads are long, well filled, beardless with bronze chaff. The grain is white or light amber, of medium length and hardness. The milling qualities are good. It is used extensively for pastry flour and shredded wheat.

In the last five years at Ithaca Honor yielded from 27.5 to 46 bushels per acre and averaged 31.5 bushels.

Cornell No. 76 Rye

Several pure lines of rye have been developed by the plant breeders at Cornell. Two of them, No. 76 and 45, have proved equal to, if not better than Rosen rye, which has held first place for some years. We have a field of Cornell No. 76 which will be entered for certification.

Beware of Stinking Smut

Stinking smut of wheat has invaded the Eastern States and is now quite wide spread. It decreases yield and badly affected wheat will not be accepted by millers. The black powdery spores are retained inside the shell of the wheat kernel until threshing time when they are scattered. Threshers spread disease. A disagreeable fishy smell gives the smut its name. All varieties seem to be susceptible. It can be controlled by thoroly coating the seed with copper carbonate dust.

All our fields were planted with treated seed and probably will be free from smut. But because of the chance of infection in threshing and handling we shall treat all seed sold. We are equipped with special electric driven machine for thoroly coating every kernel. This insurance for your crop is given without extra charge but it may be worth half of the next year's crop.

Seed Available in August

Barring loss of our crops we shall have certified seed of the above varieties to sell next summer and fall. Write for inspection reports and prices at that time.

Progress

Progress characterizes American farming to-day not notwithstanding all the talk about depression and grief. Out of adversity and hardship always have come the ideas and achievements that make conditions better. While many are still bewailing the misfortunes of agriculture and seeking a political nostrum, the industry itself is moving steadily toward better times. Progress is being made with the increasing use of better machines, better strains of crops, better fertilizing materials, better methods for pest control, better feeding methods, better live stock, better systems of farming, better marketing information and more comforts and conveniences in the farm homes. Not all is done yet but no other period in history has seen so much progress in agriculture as the present.

The job for you and me in this movement is to keep ourselves and our farming abreast the times. Doing that helps us individually and contributes that much to the progress of agriculture.

Let's Boost Together—With Better Seeds

Quaker Hill Farm

Honeoye Falls, N. Y.